Allison Guard Station Improvement Project
Environmental Assessment

Malheur National Forest
431 Patterson Bridge Road
P.O. Box 909
John Day, OR 97845
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Photograph 1: Allison Guard Station – June 6, 2003

1. What action is proposed?

The Allison Guard Station is an administrative site located in Harney County at Township 19 South, Range 26 E, Section 15, SW Quarter Section, on the Ochoco National Forest. The Malheur National Forest administers the area; however, all projects dealing with Allison Guard Station are done in compliance with the 1989 Ochoco National Forest Land and Resource Management Plan as amended.

The Malheur National Forest proposes to do the following action items: 1) convert an existing warehouse/bunkhouse into more bunkhouse space, 2) reconstruct building foundations that are deteriorating, 3) construct a new vehicle storage shed in a manner that is consistent with the site's historic character, 4) remove or modify the generator building and move the generator to the vehicle shed, 5) replace and upgrade an above ground fuel tank to meet spill standards and fire codes, 6) improve access to the cookhouse to meet Americans with Disabilities Act requirements (ADA) and 7) improve the water system by fixing the current spring box or drilling a well. Activities will begin place in 2005, and the majority of the work will be completed within 3 years.

Donaldson Cabin, which is adjacent to the station, is listed on the National Register of Historic Places. Allison Guard Station was built by the Civilian Conservation Corps in the 1930's and is eligible for inclusion on

the national register. Therefore, the Forest is working closely with the State Historic Preservation Office (SHPO) to ensure any modifications and proposed reconstruction work will not change the site's historical integrity.

Photo 2: Existing Allison warehouse/bunkhouse

Photo 3: Part of existing Allison water system

2. Why?

The purpose and need for the Allison Guard Station improvement project is to prevent the deterioration of this historic site (action item 2), while providing safe living conditions for employees stationed there and recreational rental users (action items 1, 3-7) by meeting building code specifications. Without these improvements, it is anticipated the life expectancy of the buildings would be lowered, eventually deteriorating beyond a point where they can economically be repaired or safely used. Currently, two houses are not safe for occupancy. The bunkhouse will not be useable within approximate 5 years.

A value analysis was done in November 2001. The performance criteria used for the value analysis included: annually providing adequate fire facilities from June 15 to October 15 for 12 fire fighters; maintaining the recreation rental experience; complying with health and safety requirements; maintaining the historic resources; providing a fuel storage facility; minimizing long-term operation and maintenance costs; correcting environmental problems (spill hazard); meeting code requirements, especially American with Disabilities Act; and providing fire resistant materials. It recommended: rehabilitation and utilization of the warehouse and two residential buildings to house fire crews (12 people); utilization of the existing gas house for fire equipment storage; construction of a new enclosed fire engine storage/parking facility; installation of a new above ground fuel storage facility and spill containment area; improvement and utilization of the existing water source, sewage, and power generation; and retention of the cookhouse building as a recreation rental. The value analysis is incorporated by reference (40 CFR §1502.21). The Forest has not identified any other issues for this project outside of those listed in the value analysis.

Additionally, on March 3, 2003, President George W. Bush issued Executive Order (EO) 13287 – *Preserve America*. This order instructs federal agencies "to provide leadership in preserving America's heritage by actively advancing the protection, enhancement, and contemporary use of the historic properties owned by the Federal Government, and by promoting intergovernmental cooperation and partnerships for the preservation and use of historic properties."

This environmental assessment tiers to and incorporates by reference the analysis for the 1989 Ochoco National Forest Land and Resource Management Plan (Ochoco Plan) as amended. The analysis for this plan is documented in the 1989 *Ochoco National Forest Land and Resource Management Plan Final Environmental Impact Statement*, its respective *Record of Decision*, and the *Inland Native Fish Strategy* (INFISH) amendment. An environmental assessment was prepared for INFISH. Together they provide goals and standards for practices occurring on the forest.

The Ochoco Plan goal for facilities states: Plan, construct, maintain, and manage Forest facilities to provide maximum economy, investment protection, user safety, and resource protection (LRMP p. 4-8). In addition, the proposed improvements will be designed to meet all relevant Forest Service manual and handbook policies for facilities.

3. What other action would meet the same need?

On April 4, 2003, a scoping letter for this project plus proposed water improvements for 5 campgrounds was sent to individuals and groups on the Malheur National Forest mailing list for its Schedule of Proposed Actions. They were informed, other than no action, there were no other alternatives being considered at the time. There was one respondent. The respondent felt the proposed action would protect all historic values for Allison Guard Station. With no new issues or alternatives being raised during the scoping process and to better focus this assessment, the Forest Supervisor determined the scope (40 CFR §1508.25) of this project would be limited to the Allison Guard Station improvements. A The National Environmental Policy Act (NEPA) requirement for the water improvements for the 5 campgrounds is being done under separate categorical exclusions. This project has been listed on the Malheur quarterly Schedule of Proposed Actions since the Spring/Summer 2003 edition.

Additionally, in July 2004, it was determined there was an urgent need to maintain the fuel storage capacity in fiscal year 2004 (action item 5 above) in order to adequately supply fuel for the fire suppression crews at the station. Emigrant District Ranger Margaret Bailey covered this action in a categorical exclusion on August 8,2004.

An alternative of trucking potable water to a holding tank near Allison was considered, but was not further developed. The current water tank holds 1800 gallons, and would have to be replaced to one holding 5,000 gallons in order to provide adequate water storage for drinking, eating, and showers for approximately 12 employees stationed at the guard station plus approximately 4 users of the cookhouse recreation rental. This anticipated use would require 1,040 gallons per day at 65 gallons/day/person. The current daily rate for a 4,000-gallon potable-water tender in support of fire suppression is $1,455. Normal occupancy by fire crews is from July 1 to mid-September (approximately 80 days and a need for 83,200 gallons). This would equate to an estimated annual cost of $25,000 for a water-hauling contract plus the cost of a new holding tank. These costs are considered too prohibitive; therefore this alternative is not implementable.

4. What would it mean not to meet the need?

The no action alternative for this environmental assessment would mean necessary repairs and improvements at Allison other than the fuel storage would not be initiated. Daily chlorination and monitoring plus other current required water sampling of the water supply would continue. The high risk for failure of the spring box system would continue. In

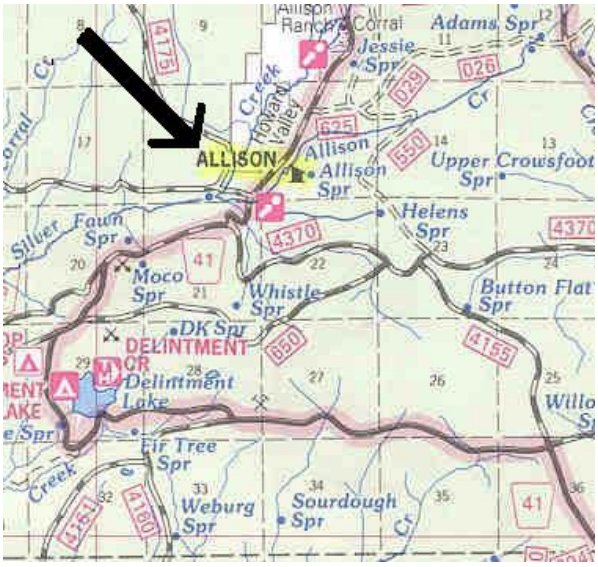
addition, increasing State regulations may soon require filtration of spring developments that do not meet current State standards. This will require additional monitoring and the installation of filtration technology at an estimated cost of $10,000 initially and an additional $3,500/year for maintenance and monitoring.

No action would require the bunkhouse and the two houses to be "mothballed" (boarded and not used or maintained). This would result in the continued deterioration of the historic structures and decrease the ability to safely house firefighters and recreational renters. There would be no generator shed, garage, and improved bunk space necessary to house firefighters efficiently. No housing for firefighters at this site would increase engine and fire crew response time for initial attack on wildfires in the area. Increased response time would increase the possibility a wildfire would escape initial attack. Failure to stop a wildland fire during initial attack results in an increase in the number of fires exceeding 100 acres in size, thus increasing suppression costs and resource losses. Additionally, not making the repairs and improvements would eventually mean non-compliance with the EO – *Preserve America*, the National Historic Preservation Act, and ADA.

5. What are the effects of the proposed action, and alternative actions – in comparative format?

The following environmental factors may be affected. There are no anticipated affects to other factors listed in Forest Service Handbook 1909.15, Chapter 60 at 61-64. Cumulative effects are identified when expected under each heading.

Location



Allison Guard Station is located in Township 19 South, Range 26 E, Section 15, SW Quarter Section, on the Ochoco National Forest. These lands are administered by the Malheur National Forest. However, management is done in compliance with the Ochoco National Forest LRMP. In that plan, the area is identified as a facilities site (MA-F28).

No Action & Proposed Action: There would be no change in land status. Also see the discussion under *Infrastructure Improvements* and *Heritage*.

Soils

No Action: There would be no new soil disturbance.

Proposed Action: Soil loss is an irreversible effect. There would be approximately 32 cubic yards of soil excavated and replaced for the waterlines and spring reconstruction if the spring is improved and approximately 12 cubic yards if a well were drilled. It is anticipated that 2 percent of this soil would be displaced or lost through erosion as sediment. However, none of the sediment is expected to reach the Allison Creek tributary to Silver Creek.

There is a swampy area next to the guard station that is expected to filter out the sediment. The effects of sediment are discussed below under *Water Quality*.

Additionally, there would be about 50 cubic yards of soil disturbance due to the fixing the foundations and building the storage shed area. This disturbed soil is not anticipated to leave the site, except for less than 0.1 cubic yard due to wind erosion. The soil disturbance would occur over approximately a week period for each building.

Cumulative: The possible cumulative effect is for additional soil displacement or loss during ongoing road maintenance if it occurs on the site's access road (Road 900) or Road 41 adjacent to the site at the same time as the water improvement work. The combined amount of soil displacement or loss would likely increase to less than 5 cubic yards. However, it is anticipated that the road maintenance would not occur at the same time as the water improvement work, and not be additive because the water improvement work would be captured in the swampy area. Therefore, it is not likely this cumulative effect will occur. Soil displacement from the foundation and building construction is not anticipated to reach any riparian areas. The disturbance caused by the replacement of the fuel storage is expected to occur in Fall 2004. Because a concrete pad is being used at the new storage site and "green up" (vegetation recovery) will occur before other proposed ground-disturbing work commences, no cumulative effects are expected from the fuel storage replace project.

Visual

No Action: Over time, these buildings will show further deterioration decreasing their visual appeal to recreational renters, visitors and employees. It would give the impression the agency is not maintaining its historic structures to standard.

Proposed Action: While the construction is occurring, the work would be obvious. However, these modifications, improvements, and new structures to the site will not cause it to dominate the surrounding landscape and will meet the historic CCC character; therefore, current visual quality requirements will be met. The buildings and grounds will look well kept after the disturbance caused by the work has had the opportunity to recover. This is anticipated to be immediately after the work is completed or within one growing season. See *Vegetation* discussion below.

Heritage Resources

The Allison Guard Station (historically the Allison Ranger Station) is a group of seven buildings in a compound built by the Civilian Conservation Corps beginning in 1935. All seven Depression-Era buildings were determined eligible for the National Register of Historic Places (NRHP) as part of a Region-wide thematic evaluation in the early 1980s. As part of this evaluation, the Allison Ranger Station complex was also identified as a significant building group for management purposes. The *Programmatic Memorandum of Understanding for Management of Depression-Era Administrative Structures on National Forest Lands in Oregon and Washington* (MOU) governs the administration of the historic components of the Allison Guard Station. No evidence of buried historic or prehistoric components has been identified at the site.

Photo 4: Allison GS in 1952

Photo 5: Warehouse in late 1930's

No Action: There would be no immediate change in the condition of the historic buildings but deterioration of the buildings over time would occur if the foundations are not reconstructed (action item 2). If the needed health and safety actions (action items 1, 3-7) are not made, it will be impossible to continue the present uses for the site, which could lead to reduced funding for building maintenance. Donaldson Cabin, which is adjacent to the station, is listed on the National Register of Historic Places. There will be no affects to this cabin.

Proposed Action: Reconstruction of the building foundations (action item 2) will protect the buildings from deterioration related to the collapsing foundations. The health and safety related projects (action items 1, 3-7) would allow for continued use and maintenance of the historic structures and compound. As stipulated VI of the MOU, all reconstruction/repair/construction activities on the Allison Guard Station buildings and historic landscape will follow the "recommended guidelines for preservation projects in [the] Secretary of the Interior's Standards for Historic Preservation Projects." Placement of the new vehicle storage shed and the possible removal of the generator building (action items 3-4) requires consultation with the Oregon State Historic Preservation Office (SHPO) under stipulation 5. Consultation on these items is ongoing. By following the terms of the MOU and consulting with the Oregon (SHPO) as needed, the historic attributes of the guard station will be protected or enhanced through implementation of the proposed action. Donaldson Cabin, which is adjacent to the station, is listed on the National Register of Historic Places. There will be no affects to this cabin. See also the effects discussion under *Social*.

Cumulative: No cumulative effects are anticipated if the proposed action is followed. Progressive deterioration of the buildings is likely under the no action alternative, which would be a cumulative effect as more of these CCC era builds become unsalvageable. This includes the work done for the fuel storage (action item 5).

<u>Water Quality</u>

The current water source is Allison Springs. The water from this spring flows into Allison Creek, a tributary to Silver Creek. An engineering feasibility study will determine if drilling a well or just improving the spring box will be used.

No Action: There would be no immediate change in water quality. Over the next decade, the standards for compliance with the Clean Water Act and Oregon State water

quality standards are expected to become more restrictive. Thus the current water source could be determined to be no longer potable. The current spring fed water source would then be closed and a new water source would be needed.

Proposed Action: Oregon drinking water standards set under the Clean Water Act would be maintained. The water system improvements are anticipated to release less than 1 cubic yard of sediment into Allison Springs; however, it is expected to settle out in the swampy area prior to reaching Allison Creek. The sediment would occur over approximately a two-week period as the current water source is improved or a well is developed. Sediment traps will be used as necessary to minimize the amount of soil displacement. A trap area is planned to catch any potential spills from the storage tank; therefore, there are no anticipated effects to water quality for this source.

Cumulative: There is the potential for additional sediment to enter Allison Creek from annual road maintenance on roads 41 and 900 (the site's access road). This would not be cumulative because it is anticipated that it would not occur at the same time as the water improvement work, and not additive because the sediment from the water improvement work would be captured in the swampy area.

Noise

No Action: There would be no increase over current noise levels or their duration.

Proposed Action: During the construction period of approximately 5 months (May to September) each year for 3 years, there would be an increase of noise levels and its duration. Actual work would take place approximately over 3 months during this period. The workweek is anticipated to be normally Monday through Friday with construction work occurring from 7:30 AM to dusk. Effects to wildlife are discussed under the *Wildlife* discussion below and to recreationists under *Recreation*.

Land Use

No Action & Proposed Action: The Ochoco Plan designates this area as an administrative site. There is no change in land use or the site boundary.

Infrastructure improvements

No Action: The life expectancy of the affected buildings would be lowered, eventually deteriorating beyond a point where they can be economically repaired or safely used. This is anticipated to occur within the next 5 years. The buildings contribution to this National Historic Register of Historic Places site would end.

Proposed Action: The life expectancy of the buildings would be extended approximately 50 years with continued annual maintenance. The facilities would be brought back to building code specifications improving their safety.

See also the discussion under *Heritage* above and *Recreation* below.

Vegetation & Sensitive plants

No Action: There would be no project created change to the vegetation at the site.

Proposed Action: The water improvement activity, the fixing of building foundations, installation of the storage tank and other construction would disturb or temporarily remove grasses, forbs, and other plants located on or next to these actions. Recovery of areas made bare or disturbed would recover with the next growing season. There is no vegetation conversion expected. The composition and percentage of coverage the current vegetation species provide will remain essentially the same.

There are no known threatened, or endangered or plant species in the project area**.**

Only one sensitive plant species is documented to be present in the general vicinity of the project area (*Calochortus longebarbatus var. peckii*). The only known population of this species is far enough away from proposed activities (approx. ¼ mile) that no impacts to this population are anticipated.

Habitat for nine (9) other species of sensitive plants is documented in the general vicinity of the project area. None of these species were identified during field surveys. Proposed activities May impact habitat (not individuals) but will not likely contribute to a trend towards federal listing, or cause a loss of viability to the species **(MIIH).** See the *Biological Evaluation* (BE) for this project for further information.

Wildlife

Threatened, endangered or sensitive animal species found in the general vicinity of the project area are: Northern bald eagle (T) and Columbia spotted frog (S).

No Action: There would be no changes to wildlife or their habitat.

Proposed Action:

Northern bald eagle: There is no known use of the area by the bald eagle (*Haliaeetus leucocephalus*)**.** The nearest nesting site is Delintment Lake; approximately 2 air miles away to the southwest. A no effect **(NE)** determination is made for bald eagles and bald eagle habitat, based on the following:

- There are no bald eagle nests by Allison Guard Station.
- Project will not affect foraging habitat.
- No observations have been made of bald eagles foraging on the ponds near Allison.
- No old growth trees, which eagles may use for nesting, roosting and foraging, would be affected.

Columbia spotted frog: The Columbia Spotted Frog (*Rana luteiventris*) has been documented in the project area. Activities may impact individuals or habitat, but will not likely contribute to a trend towards federal listing, or cause a loss of viability of the population or species **(MIIH).** Work timing restrictions and sediment traps to reduce the risk of sediment leaving the work site will reduce the risk of potential impacts. As mitigation, the area will be surveyed for frogs just prior to implementing the water system improvements. If any frogs are found they will be removed to the swampy area. This technique has been successfully used to mitigate effects for other activities.
There are no anticipated effects to other wildlife species other than the noise of construction. The periods of time when the construction work is taking place will increase the noise level. Increased noise levels can displace wildlife like deer that use the area. This would be a temporary displacement. Since there are large undisturbed areas surrounding this site where displaced wildlife can go, no lasting effects are anticipated.

Fish

There are no known threatened, or endangered fish species in the vicinity of the project area**.** Interior redband trout (*Oncorhynchus mykiss* ssp.) are present in the watershed, downstream of the project area.

No Action & Proposed Action: The use of sediment traps at the work site, and the trapping of any sediment in the swampy area between the work site and Allison Creek

will result in No Impact (NI) on redband trout.

Recreation

No Action: If the water system is not upgraded there will come a point where state water quality standards are not met. At that time either the structure will become unavailable for rent or if rented, the lack of amenities will drop the nightly cost. This in turn would decrease the amount of money available to maintain the facilities. The current lack of appropriate access for individuals with disabilities would continue.

Proposed Action: It is anticipated that the work required for spring box improvement or well drilling will be approximately 2 weeks. There would be an approximately 3-month period where the Allison cookhouse would not be available for rent. The cookhouse will eventually be remodeled to provide appropriate access under the Americans with Disabilities Act requirements as funding permits.

Noxious Weeds

Currently there are no known noxious weeds located on the site**.**

No Action & Proposed Action: Noxious weeds are known to readily occupy disturbed sites. Prevention is the preferred method of dealing with noxious weeds, and equipment washing before entry onto the forest is a common mitigation. Because there are no known noxious weed sites within the vicinity of the guard station, there is no anticipated threat of their spread by any of the project activities. Forest visitors, the stations engines, employee vehicles currently are not required to wash their equipment prior to entry, and noxious weeds are not present. If noxious are discovered in the future, removal of noxious weeds will be done manually. This document does not cover the use of chemical treatments. As mitigation, if heavy equipment is used for any of the project work, it will be washed before entry onto the Forest.

Costs

No Action: The bunkhouse and two houses will be mothballed and only the cookhouse and remaining structures would continue to be maintained to standards, i.e. the site is essentially abandoned except for the cookhouse. The life-cycle cost is $10,900 per year (maintenance and eventual major repair of the cookhouse). Currently little recreation rental money is collected; therefore, deferred maintenance will continue. As the buildings deteriorate and become unsafe their use of the site as a recreation rental would be discontinued. This source of income would no longer be available. The cost of initial attack for fire suppression would increase if the guard station were abandoned. The increased response time for initial attack could lead to more acres lost to wildfire, increasing the lost of other resource values.

Proposed Action: The water system and building improvements will cost approximately $785,000. The maintenance and replacement (life-cycle) costs after the improvements are completed would be approximately $32,000 per year. These costs would be slightly offset by the continued availability of the site as a recreation rental. Continued use as a guard station would save response time for wildfire starts in the area, maintaining other resource values.

Social

No Action: The social value of this 1930's era Civilian Conservation Corps (CCC) built site would continue to deteriorate and would eventually be lost. The goals of EO 13287 – *Preserve America* would not be met.

Cumulative: Forest Service is losing CCC built structures locally, regionally and

nationally. These losses are due to deterioration because of a lack of maintenance funding nationally, vandalism, arson, and natural disasters. For example, in the summer of 2002, two CCC built structures were destroyed in the Flagtail Fire at the Malheur National Forest Bear Valley Guard Station.

Proposed Action: Remodeling of the available quarters will allow mixed-gender crews to be stationed at the facility. In addition, engine captains will be able to house separately from their crews, which is a preferred arrangement. Reconstruction of these facilities will prevent further deterioration and make them available for future generations to show the historic nature of Forest Service Operations.

6. What factors will be used in making the decision between alternatives?

The following factors will be used:

- Preservation of this National Historic Register Site and the *Preserve America* EO,
- Continued use of the site as a housing facility for fire crews,
- Safety for the fire crews and renters using the facilities, and
- The annual maintenance and life-cycle costs for this facility (value analysis).

7. Are there any ways to mitigate potential adverse effects?

Required Mitigation Measures:

- All work on historic structures at Allison Guard Station will be coordinated with SHPO prior to initiating action, and building designs will match the historic CCC character.
- Sediment trapping as needed during spring box improvement or well drilling.
- Survey and removal of frogs prior to water improvement work.
- Heavy equipment used for any of the project work will be washed before entry onto the Forest to prevent the spread of noxious weeds.

8. Define necessary monitoring not included in the proposed action or alternative action.

- Maintenance Condition surveys and Health and Safety Surveys for Allison Guard Station annually as per Forest Service Handbook 7309.11 Chapter 44.
- Sanitary surveys every 5 years for the water systems as per Forest Service Manual 7421.13.
- Monthly water quality monitoring while the water system is open as per Forest Service Manual 7421.2

Agencies and Persons Consulted

- Oregon State Historic Preservation Office
- Burns Interagency Fire Center (BLM & FS)